

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: MOUNTAIN POND	Lake Area (ha):	10.12
Town: NEW IPSWICH	Maximum depth (m):	2.5
County: Hillsborough	Mean depth (m):	1.5
River Basin: Connecticut	Volume (m <sup>3</sup> ):	147000
Latitude: 42°44'55" N	Relative depth:	0.7
Longitude: 71°55'45" W	Shore configuration:	---
Elevation (ft): 1252	Areal water load (m/yr):	14.89
Shore length (m): ---	Flushing rate (yr <sup>-1</sup> ):	10.30
Watershed area (ha): 248.9	P retention coeff.:	0.51
% watershed ponded: 0.0	Lake type:	natural w/dam

BIOLOGICAL:

	27 February 1990	12 September 1989
DOM. PHYTOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	PERIDINIUM 60%
#2		UROGLENOPSIS 25%
#3		CERATIUM 15%
PHYTOPLANKTON ABUNDANCE (cells/mL)		1365.0
CHLOROPHYLL-A (µg/L)		8.79
DOM. ZOOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	CONOCHILOIDES 63%
#2		KELICOTTIA 21%
#3		
ROTIFERS/LITER	11	916
MICROCRUSTACEA/LITER	2	76
ZOOPLANKTON ABUNDANCE (#/L)	13	997
VASCULAR PLANT ABUNDANCE		Scattered
SECCHI DISK TRANSPARENCY (m)		1.6
BOTTOM DISSOLVED OXYGEN (mg/L)	12.1	0.0
BACTERIA (fecal col., #/100 ml) #1		
#2		
#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>): None

CHEMICAL:

Lake: MOUNTAIN POND  
Town: NEW IPSWICH

	27 February 1990		12 September 1989		
DEPTH (m)	1.0	2.0	1.0		2.0
pH (units)	4.9	5.2	6.3		5.9
A.N.C. (Alkalinity)	-0.5	0.1	2.2		2.1
NITRATE NITROGEN	0.06	0.06	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.44	0.36	0.46		0.46
TOTAL PHOSPHORUS	0.009	0.011	0.015		0.012
CONDUCTIVITY ( $\mu$ mhos/cm)	26.3	27.0	23.7		23.8
APPARENT COLOR (cpu)	20	22	90		100
MAGNESIUM			0.36		
CALCIUM			1.6		
SODIUM			< 3.0		
POTASSIUM			0.90		
CHLORIDE	< 2	< 2	2		2
SULFATE	6	6	4		4
TN : TP	56	38	31		38
CALCITE SATURATION INDEX			4.5		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1989

D.O. S.D. PLANT CHL TOTAL CLASS

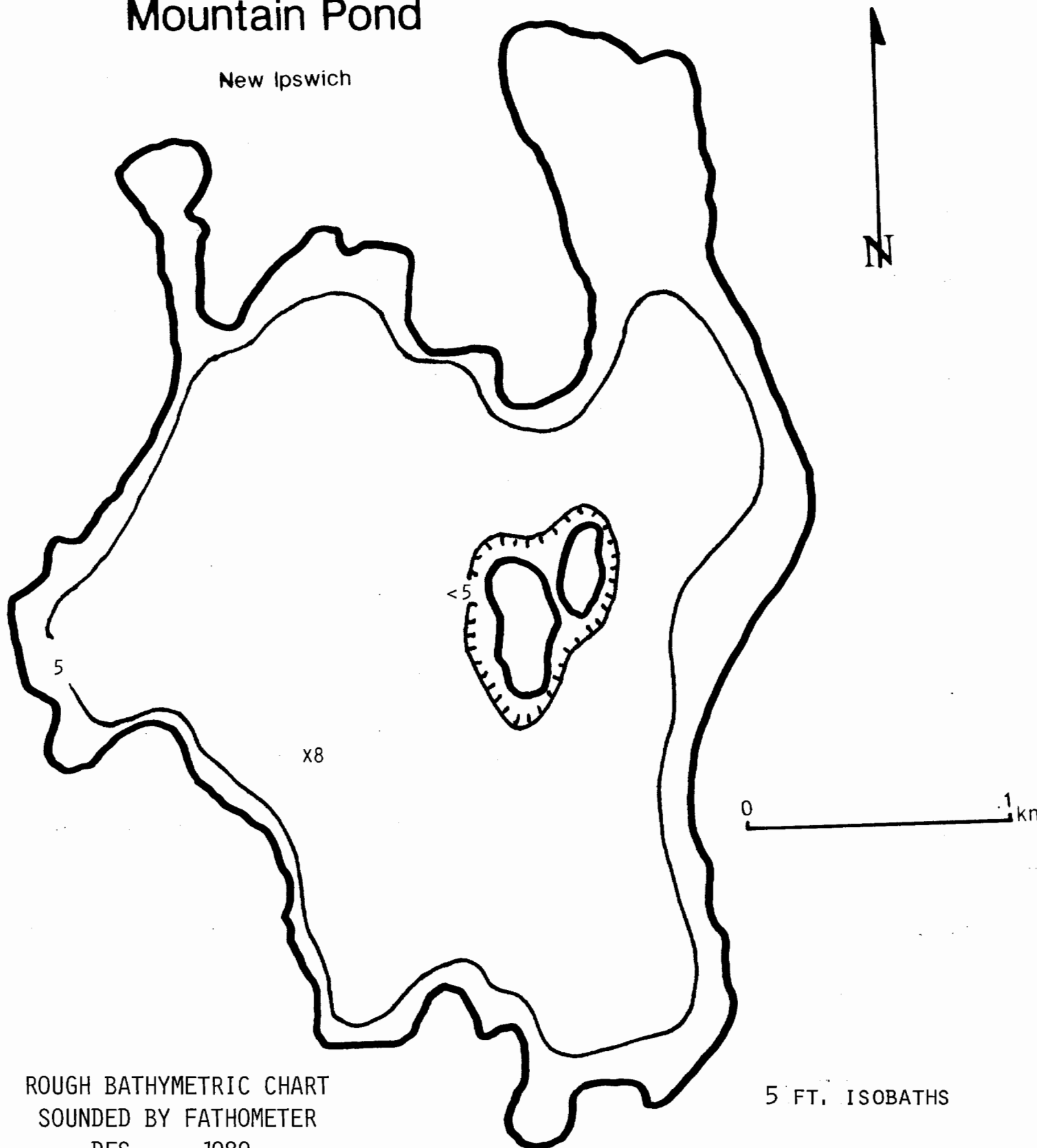
**	4	1	2	7	Meso.
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COMMENTS:

1. No public access. All the land around the pond is owned by the New England Forestry Foundation, and a locked gate is across the only road to the pond.
2. Two camps were located on the shoreline.
3. Merismopedia and Anacystis were the dominant genera of whole-water phytoplankton.

# Mountain Pond

New Ipswich



ROUGH BATHYMETRIC CHART  
SOUNDED BY FATHOMETER  
DES - 1989

5 FT. ISOBATHS

[illegible]

TOWN: NEW IPSWICH  
WEATHER: MOSTLY OVERCAST; COOL

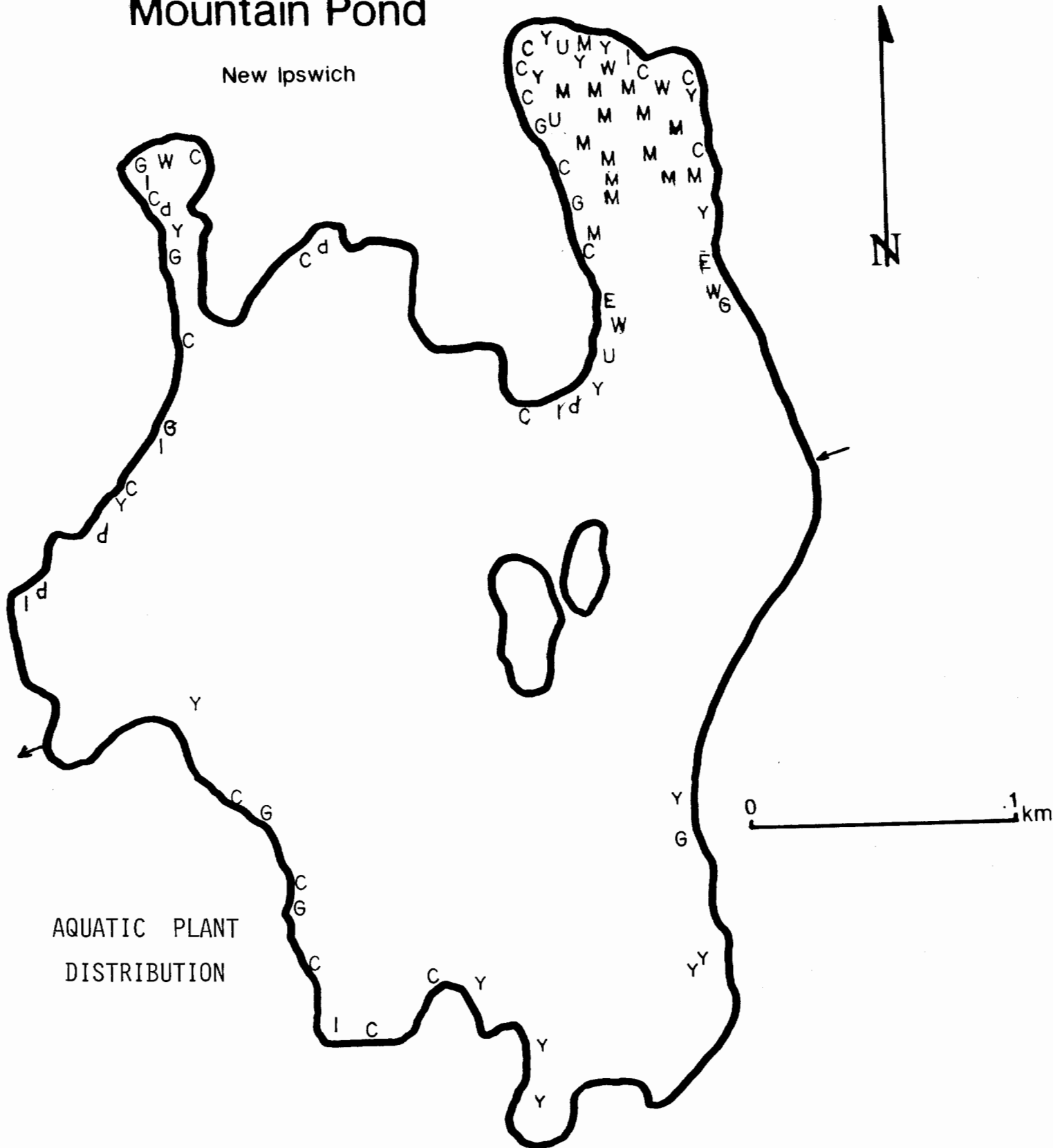
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SECCHI DISK (m):      1.6          COMMENTS:
BOTTOM DEPTH (m):     2.5
TIME: 1235
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\*Dissolved oxygen values are in mg/L

# Mountain Pond

New Ipswich



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